

SMA6501

Silicon NPN, PNP Epitaxial Planar

Maximum Ratings

(Ta=25°C)

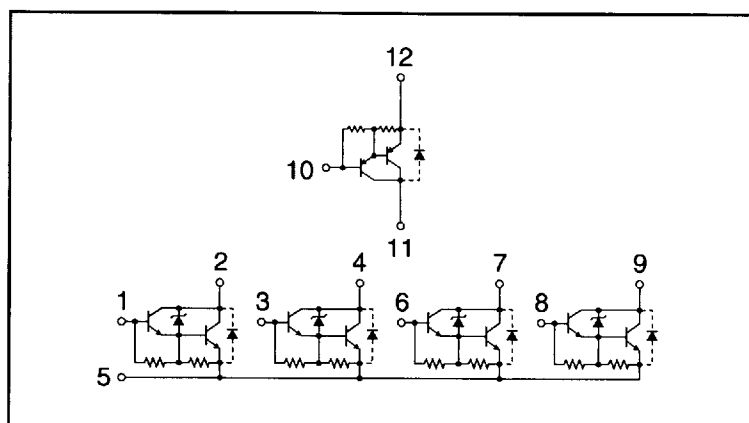
Item	Symbol	Ratings		Unit
		NPN	PNP	
Collector-to-Base Voltage	V _{CBO}	100 ± 15	− 50	V
Collector-to-Emitter Voltage	V _{CEO}	100 ± 15	− 50	V
Emitter-to-Base Voltage	V _{EBO}	6	− 6	V
Collector Current	I _C	2	− 4	A
Base Current	I _B	0.5	− 0.5	A
Total Power Dissipation	P _T	4 (T _a = 25°C)		W
		20 (T _c = 25°C)		
Storage Temperature	T _{stg}	− 40 ~ + 150		°C

Electrical Characteristics

(Ta=25°C)

Item	Symbol	Specification		Unit
		NPN	PNP	
Collector Cut-off Current	ICBO	10max (VCB=85V)	-10max (VCB=-50V)	μA
Emitter Cut-off Current	IEBO	5max (VEB=6V)	-10max (VEB=-6V)	mA
Collector-to-Emitter Voltage	VCEO	100±15min (IC=10mA)	-50min (IC=-10mA)	V
DC Forward Current Transfer Ratio	hFE	2000min (VCE=4V, IC=1A)	2000min (VCE=-4V, IC=-2A)	
Collector-to-Emitter Saturation Voltage	VCE(sat)	1.5max (IC=1A, IB=2mA)	-1.5max (IC=-2A, IB=-4mA)	V

Equivalent Circuit Diagram

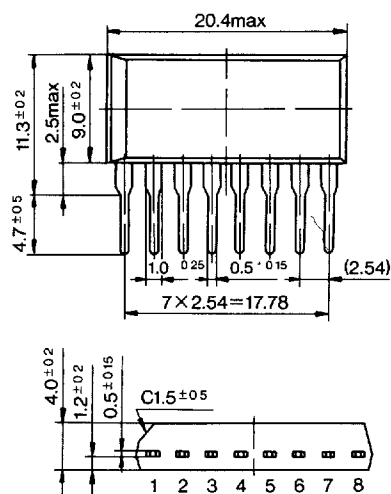


Notes on using products

Outline Drawings (Unit:in mm)

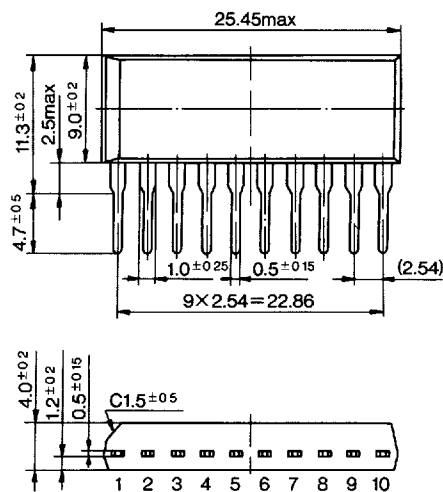
STA Family

STA300 Series



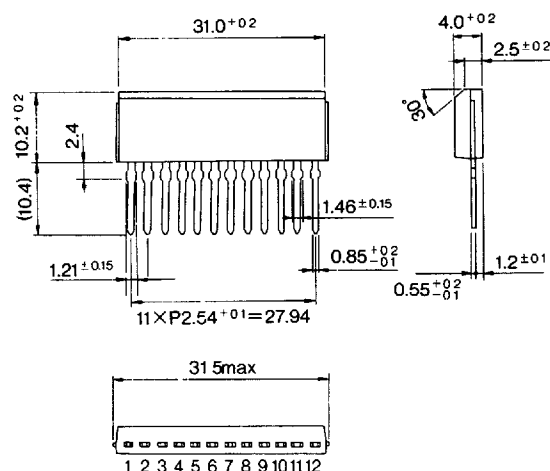
Weight Approx. 2.0g

STA400 Series



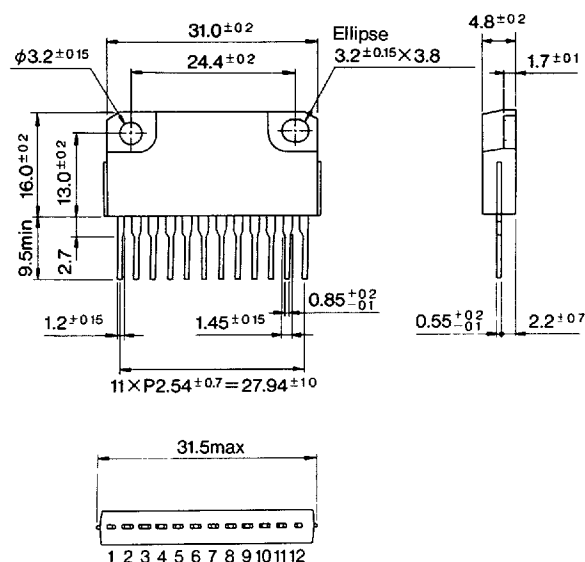
Weight Approx. 2.6g

SMA Family



Weight Approx. 4.0g

SLA Family



Weight Approx. 6.0g